

03/20/14 Agenda

- Warm Up
- Review Homework
 - Worksheet 3 - Multiplying Polynomials
- Review 8.1-8.4
- Homework
 - Finish Review Worksheet
 - Fill in MathO game sheet

Warm Up



Put your name on a slip of paper.

Simplify:

$$(6n - 4)(n^2 + 5n + 7)$$

$$6n^3 + \underline{30n^2} + \underline{42n} - \underline{4n^2} - \underline{20n} - 28$$

$$6n^3 + 26n^2 + 22n - 28$$

$$(6n - 4)(n^2 + 5n + 7)$$

		$n^2 + 5n + 7$	
$6n$	$6n^3$	$+30n^2$	$+42n$
-4	$-4n^2$	$-20n$	-28

	$6n - 4$	
n^2	$6n^3$	$-4n^2$
$+5n$	$+30n^2$	$-20n$
$+7$	$+42n$	-28

What does this mean?

$$(x+4)^2 = (x+4)(x+4)$$

$$\begin{array}{cccc} & & x^2 & +4x & +4x & +16 \\ & & \underline{x^2} & +\underline{4x} & +\underline{4x} & +16 \\ & & x^2 & +8x & +16 \end{array}$$

Try these:

$$(x+3)^2$$

x^2	$+3x$
$+3x$	$+9$

$$x^2 + 6x + 9$$

$$(5g+2)^2$$

$$\begin{array}{cccc} & & 25g^2 & +10g & +10g & +4 \\ & & \underline{25g^2} & +\underline{10g} & +\underline{10g} & +4 \\ & & 25g^2 & +20g & +4 \end{array}$$

$$(6x-4)^2$$

$$(3m+1)^2$$

$9m^2$	$+3m$
$+3m$	$+1$

$$9m^2 + 6m + 1$$

$$(p-2)^2$$

$$p^2 - 4p + 4$$

$$(x-y)^2$$

Explain why: $(x+5)^2 \neq x^2 + 5^2$

$$x^2 + 10x + 25 \neq x^2 + 25$$

What sort of pattern do you see here?

Simplify:

$$(\underline{7v} + \underline{6}) + (\underline{5v} + \underline{6})$$

$$12v + 12$$

$$(5b^4 + 2) - \overset{\curvearrowright}{1}(1 - b^4)$$

$$5b^4 + 2 - 1 + b^4 = 6b^4 + 1$$

$$(\underline{4} + \underline{\underline{6n^3}} + \underline{\underline{6n}}) + (\underline{\underline{3n}} + \underline{1} + \underline{\underline{7n^3}})$$

$$5 + 13n^3 + 9n$$

$$(n^3 - 5 + 2n) - \overset{\curvearrowright}{1}(\overset{\curvearrowright}{8n^4} - \overset{\curvearrowright}{2n^3} - 2)$$

$$\underline{n^3} - \underline{\underline{5}} + 2n - 8n^4 + \underline{2n^3} + \underline{\underline{2}}$$

$$3n^3 - 3 - 8n^4 + 2n$$

Find each product:

$$3(6m - 4)$$

Handwritten work:

$$6m - 4$$

$$3 \begin{array}{|c|c|} \hline 18m & -12 \\ \hline \end{array}$$

$$18m - 12$$

$$5n^2(n + 3)$$

Handwritten work:

$$5n^3 + 15n^2$$

$$(7a - 1)(2a - 5)$$

Handwritten work:

	$7a - 1$	
$2a$		
-5		

$$(7k - 5)(3k - 1)$$

$$(5p + 6)(4p^2 - 5p + 3)$$

Find each product:

$$(5m + 8)(5m - 8)$$

$$25m^2 - 64$$

$$(3 + 2n)(3 - 2n)$$

$$(7b - 2)^2 = (7b - 2)(7b - 2)$$